

Remarks

Claims 1, 12 and 23 have been amended. No new matter has been added.

Claim Objections

Claims 1, 12 and 23 were objected to for informalities. In response, these claims have been amended to correct informal language. Applicant respectfully requests reconsideration of the specification in view of this amendment.

Claim Rejections Under 35 U.S.C. §101

Claims 1-2, 6-7, 12-13, 17-18, 23-24, 28-29 and 34-60 stand rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. In response, Applicant respectfully traverses.

Under 35 U.S.C. §101, whoever invents or discovers any new and useful process may obtain a patent therefor. Under MPEP 706.03(a), the term "process", as defined in 35 U.S.C. 100, includes a new use of a known process.

Since generating an electronic design is a known process and Applicant has invented a new and useful process for generating an electronic design, a rejection under 35 U.S.C. §101 is improper and should therefore be withdrawn.

Moreover, Applicant asserts that generating an electronic design is a practical application of an idea because the claimed invention provides a useful, concrete and tangible result.

Applicant respectfully requests reconsideration of these claims and withdrawal of the rejection.

Claim Rejections Under 35 U.S.C. §102

Claims 1, 6-7, 12, 17-18, 23, 28-29 and 34-60 stand rejected under 35 U.S.C. §102(a) as anticipated by Chow ("EVE: A CAD Tool for Manual Placement and Pipelining Assistance of FPGA Circuits", ACM, Feb. 2002, pp. 85-94). Applicant respectfully traverses.

Independent claim 1 recites the following limitations:

generating an electronic design;

automatically specifying one or more pipeline locations of the electronic design;

determining whether to insert one or more clocked elements at the one or more automatically-specified pipeline locations where a determination is made of whether to avoid inserting one or more clocked elements for at least one of the one or more pipeline locations; and

based upon results of determining whether to insert the one or more clocked elements, automatically modifying a number of clocked elements in the one or more pipeline locations of the design.

Applicants respectfully submit that Chow does not disclose such limitations.

According to Chow, in sections 3-5, a user or designer designates the placement of circuit elements and any changes to the placement of the circuit elements. When a circuit element is physically moved by the user, Chow calculates the critical path delay of the target location designated by the user. In section 4, Chow specifically asserts that, for pipelining, a circuit representation cannot clearly present to the user where circuit elements can be inserted. Therefore, Chow does not disclose each and every feature of the present claims.

In contrast to Chow, the present claims require automatically specifying one or more pipeline locations of the electronic design. The present claims also require determining whether to insert one or more clocked elements at the one or more automatically-specified pipeline locations where a determination is made of whether to avoid inserting one or more clocked elements for at least one of the one or more pipeline locations and, based upon results of determining whether to insert the one or more clocked elements, automatically modifying a number of clocked elements in the one or more pipeline locations of the design.

Accordingly, the Chow reference does not disclose each and every limitation of independent claim 1, as amended.

For at least these reasons, it is respectfully submitted that independent claim 1, as amended, including any claims dependent thereon, are allowable over Chow.

For at least the same reasons, it is respectfully submitted that independent claims 12 and 23, as amended, including any claims dependent thereon, are also allowable over Chow.

Claim Rejections Under 35 U.S.C. §103

Claims 2, 13 and 24 stand rejected under 35 U.S.C. §103(a) as obvious over Chow in view of Smits (US 6,631,444). Applicant respectfully traverses.

In view of the previous discussion above, the Chow reference does not disclose or even suggest each and every limitation of independent claim 1, as amended.

Moreover, the ancillary Smits reference does not remedy the deficiencies of Chow.

For at least these reasons, it is respectfully submitted that dependent claims 2, 13 and 24 are allowable over the cited references.

Conclusion


Based on the foregoing, all claims are believed allowable, and an allowance of the claims is respectfully requested. If the Examiner has any questions or comments, the Examiner is respectfully requested to contact the undersigned at the number listed below.

The Commissioner is authorized to charge any fees due in connection with the filing of this document to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **7016672001**. The Commissioner is authorized to credit any overpayment or to charge any underpayment to Bingham McCutchen's Deposit Account No. 50-2518, referencing billing number **7016672001**.

Respectfully submitted,
Bingham McCutchen LLP

Date: August 17, 2006

By: _____


Jeffrey A. Hopkins
Registration No. 53,034

Three Embarcadero Center, Suite 1800
San Francisco, California 94111
Telephone: (213) 680-6400
Telefax: (213) 680-6499